

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-15 (canceled)

Claim 16 (original) A method for obtaining a soft decision value for a particular bit of a multibit phase shift key symbol, said method comprising:

forming a received estimate of said multibit phase shift key symbol;

obtaining a first angular difference between polar coordinates of said received estimate and polar coordinates of a nearest in angle ideal symbol having zero as a value for said particular bit;

obtaining a second angular difference between polar coordinates of said received estimate and polar coordinates of a nearest in angle ideal symbol having one as a value for said particular bit; and

forming a soft decision value for said particular bit based on said first angular difference and said second angular difference.

Claim 17 (original) The method of claim 16 wherein said soft decision value is formed further based on an amplitude of said received estimate, said amplitude acting as a confidence value.

Claim 18 (original) The method of claim 16 wherein said phase shift key symbol comprises a detection symbol in a DPSK system.

Claim 19 (original) A method for obtaining a soft decision value for a particular bit of a multibit phase shift key symbol, said method comprising:

forming a received estimate of said multibit phase shift key symbol; and

forming a soft decision value for said particular bit based on angular differences between said received estimate and ideal values for said multibit phase shift key symbol.